BRUHAT BENGALURU MAHANAGARA PALIKE

Yelahanka Division

Name of Work :Improvements to roads & drains at B sector & surrounding areas in ward no.04.

Est .Cost Rs. 100.00 Lakhs

Sl No	Description of Items	Unit	No	L	B	D	Qty	Rate	Amount
	Removing and refixing stone slabs of drains and pointing in CM (1:3)(Pg no 27/5.33)								
		Sqm							
	13th B main road from 16th B cross road to 19th B cross road	LHS	1	76.00	0.90		68.40		
		RHS	1	65.00	0.90		58.50		
	18th B cross road from 13th B main road to 12th B main road		2	112.00	0.90		201.60		
	17th B cross road from 13th B main road to 12th B main road		2	115.00	0.90		207.00		
	12th B main road from 16th B cross road to 19th B cross road	LHS	1	115.00	0.90		103.50		
		RHS	1	105.00	0.90		94.50		
1	9th B main road from 10th B cross road to 13th B cross road	LHS	1	180.00	0.90		162.00		
		RHS	1	174.00	0.90		156.60		
	11th B cross road from 12th B main road to 9th B main road	LHS	1	130.00	0.90		117.00		
		RHS	1	120.00	0.90		108.00		
	13th B cross road from 8th B main road to 10th B main road	LHS	1	145.00	0.90		130.50		
	10th B main road from 11th C/ to 13th B main road	RHS	1	140.00	0.90		126.00		
							1533.60		
	Missing Slabs 30%						460.08		
							1073.52	111.30	119482.78
	Basic Rate	105.00							
	Area Weightage @ 6%	6.30							
		111.30							
	KSRRB 300-3 Earthwork excavation by manual means in ordinary soil involving in average horizontal throw up to 2m & an average lift upto 1.5m , excavated surface leveled & sides neatly dressed , the disposed earth to be levelled neatly after breaking of clods complete as per specification MORTH/ Chapter 3 Page No. 142/ Item No. 19.1/ PWD SR 2018-19								
	Desilt								
	13th B main road from 16th B cross road to 19th B cross road	LHS	1	76.00	0.60	0.60	27.36		
		RHS	1	65.00	0.60	0.60	23.40		
	18th B cross road from 13th B main road to 12th B main road		2	112.00	0.60	0.60	80.64		
	17th B cross road from 13th B main road to 12th B main road		2	115.00	0.60	0.60	82.80		
	12th B main road from 16th B cross road to 19th B cross road	LHS	1	115.00	0.60	0.60	41.40		
		RHS	1	105.00	0.60	0.60	37.80		
2	9th B main road from 10th B cross road to 13th B cross road	LHS	1	180.00	0.60	0.60	64.80		
		RHS	1	174.00	0.60	0.60	62.64		
	11th B cross road from 12th B main road to 9th B main road	LHS	1	130.00	0.60	0.60	46.80		
		RHS	1	120.00	0.60	0.60	43.20		
	13th B cross road from 8th B main road to 10th B main road	LHS	1	145.00	0.60	0.60	52.20		
		RHS	1	140.00	0.60	0.60	50.40		
	New Culvert								
	Chikkabommasandra main road	RHS	4	7.60	1.80	0.90	48.60		
	Basic Rate	130.00							
	Loading & unloading	57.00					662.04	233.20	154387.73
	Add for lead for earth (1.25 Kms / Cum) (50%	46.40							
	Area Weightage @ 6%	7.80							
		233.20							

	KSRB 4-1.2 : Providing and laying in position plain cement concrete of cum mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. KBS 4.1.4.2 (Page No.13, I No.4.2 of KPWD SR 2018-19)								
3	**New Culvert**								
		RHS	4	7.50	1.50	0.15	6.75		
							6.75	5505.64	**37163.07**
	Basic Rate	5194.00							
	Area Weightage @ 6%	311.64							
	Total	**5505.64**							
	KSRB 4.2.2 : Providing and laying in position reinforced cement concrete of design mix M20 with OPC cement @ 320 kgs, with 20mm and down size graded granite metal coarse aggregates @0.878cum and fine aggregates @ 0.459cum, with superplasticiser @ 3lts confirming to IS9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15cms thick, vibrated for all works in foundation plinth and ground floor level for roof slabs, staircase, lintles, retaining walls, return walls, walls (any thickness) including attached plasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, pad blocks, anchor blocks, plain window cill, fillet etc. including cost of all materials, labour, HOM of machinery, curing, complete as per specifications. Specification No. KBS 4.1, 4.5 (Page 14/4.11) 2018-19								
4	**Walls**								
	New Culvert								
		RHS	8	7.50	0.20	0.90	10.80		
	Raft								
	New Culvert								
		RHS	4	7.50	1.20	0.15	5.40		
							16.20	5998.54	**97176.35**
	Basic Rate	5659.00							
	Area Weightage @ 6%	339.54							
	Total	**5998.54**							
	KSRB 4-6.4 : **Providing and removing centering, shuttering,** strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, including attached pilasters, buttresses, plinth cills and string courses cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 (Page 16/4.31) of KPWD S.R 2018-19								
5	**New Culvert**								
		RHS	16	7.50		0.90	108.00		
							108.00	379.48	**40983.84**
	Basic Rate	358.00							
	Area Weightage @ 6%	21.48							
	Total	**379.48**							
	KSRB 4.9.2 : Providing **T.M.T Fe 500 steel** reinforcement for R.C.C. work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured & paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3(P-18/4.46.2)								
6	**For Culvert**	**Ton**							
	Total RCC Quantity =	Cum							
	For 1 Cum = 85	Kg					16.20		
		Kg					85.00		
							1377.00		
	Basic Rate	70956.00					**1.38**	75223.96	**103583.39**
	Area Weightage @ 6%	4257.96							
	Total	**75223.96**							

103809.06

7	Providing & laying precast drain cover slab of 100 mm thickness in CM 1:3 including cost of all materials, labour, curing, transportation, loading, unloading etc, complete as per the directions of the Engineer In Charge (1.20 x 0.60 x 0.10)Data rate										
		Sqm									
	Missing slab							460.08			
								460.08	2095.00		963867.60
	DATA Rate	2095.00									
	Total	2095.00									
8	Providing & laying precast drain cover slab of 250 mm thickness in CM 1:3 including cost of all materials, labour, curing, transportation, loading, unloading etc, complete as per the directions of the Engineer In Charge (1.2 x 0.60 x 0.10)Data rate										
	Covering slab	Sqm									
	New Culvert										
		RHS	4	7.60	1.80			54.72			
								54.72	5418.00		296472.96
		Sqm									
	Data Rate	5418.00									
	Total	5418.00									
9	Removing and resetting of kerb stones. Page No. 270/ Item No 37.57/ PWD SR 2018-19										
		Sqm									
	13th B main road from 16th B cross road to 19th B cross road	LHS	1	76.00				76.00			
		RHS	1	65.00				65.00			
	18th B cross road from 13th B main road to 12th B main road		2	112.00				224.00			
	17th B cross road from 13th B main road to 12th B main road		2	115.00				230.00			
	12th B main road from 16th B cross road to 19th B cross road	LHS	1	115.00				115.00			
		RHS	1	105.00				105.00			
	9th B main road from 10th B cross road to 13th B cross road	LHS	1	180.00				180.00			
		RHS	1	174.00				174.00			
	11th B cross road from 12th B main road to 9th B main road	LHS	1	130.00				130.00			
		RHS	1	120.00				120.00			
	13th B cross road from 8th B main road to 10th B main road	LHS	1	145.00				145.00			
		RHS	1	140.00				140.00			
	30% Damaged kerb							1704.00			
	Basic Rate	99.00						511.20			
	Area Weightage @ 6%	5.94						1192.80	104.94		125172.43
	Total	104.94									
10	Providing and fixing pre cast solid concrete kerb stones of size 450x150x500 mm made out of CC 1:2:4 and finished with CM 1:3 plastering and finishing cutting etc , complete Page No. 27/ Item No. 5.29.2/ PWD SR 2018-19										
		Sqm									
	No Of Kerb Legth/ 45							511.20			
	Basic Rate	441.00						1136.00	467.46		531034.56
	Area Weightage @ 6%	26.46									
	Total	467.46									

	KSRRB 800-1 Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8 Page No. 180/ Item No. 24.1/ PWD SR 2018-19								
		Sqm							
11			1	511.20	0.40		204.48		
							204.48	84.80	17339.90
	Basic Rate	80.00							
	Area Weightage @ 6%	4.80							
	Total	84.80							
	KSRRB 300-50. Scarifying bituminous course 50mm to 75mm thick along with premix carpet / surface dressing by road roller attached with scarifier without disturbing the base and stacking the debris including cost of all labour charges, HOM of machineries complete as per specifications. MORTH / Chapter 3								
		Cum							
	13th B main road from 16th B cross road to 19th B cross road		1	76.00	6.00	0.20	91.20		
12	18th B cross road from 13th B main road to 12th B main road		1	112.00	6.00	0.20	134.40		
	17th B cross road from 13th B main road to 12th B main road		1	115.00	6.00	0.20	138.00		
	Basic Rate	39.00							
	Add for lead earth (1.28 tonne/cum) for 15km	48.00							
	Area Weightage @ 6%	2.34							
	Total	89.34					363.60	89.34	32484
	KSRRB M300-14. Excavation for roadwork in all types of soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location to a lead of 1.00 km and complete as per specifications. MORTH Specification No.301(pg no-143,S.Lno-19.14)KPWD S.R 2018-19								
	Road Work	Cum							
	13th B main road from 16th B cross road to 19th B cross road		1	76.00	6.00	0.30	136.80		
	18th B cross road from 13th B main road to 12th B main road		1	112.00	6.00	0.30	201.60		
	17th B cross road from 13th B main road to 12th B main road		1	114.00	6.00	0.30	205.20		
	12th B main road from 16th B cross road to 10th B cross road		1	115.00	1.80	0.30	62.10		
13	9th B main road from 10th B cross road to 13th B cross road		1	180.00	1.80	0.30	97.20		
	11th B cross road from 12th B main road to 9th B main road		1	130.00	1.80	0.30	70.20		
	13th B cross road from 8th B main road to 10th B main road		1	145.00	1.80	0.30	78.30		
	Cross road		1	260.00	1.80	0.30	140.40		
							991.80	138.86	137721.35
	Basic Rate	41.00							
	Loading & unLoading	57.00							
	Add for lead for earth (1.28 Tonne / Cum) for 15km	38.40							
	Area Weightage @ 6%	2.46							
		138.86							
	KSRRB M400-6.1 Construction of granular sub-base by providing close graded material, mixing in a mechaical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications. A. Plant Mix Method For Grading II Material (pg no- 153,S.Lno-20.5)KPWD S.R 2018-19								
		Cum							
	13th B main road from 16th B cross road to 19th B cross road		1	76.00	6.00	0.15	68.40		

	18th B cross road from 13th B main road to 12th B main road		1	112.00	6.00	0.15	100.80		
	17th B cross road from 13th B main road to 12th B main road		1	114.00	6.00	0.15	102.60		
14	12th B main road from 16th B cross road to 19th B cross road		1	115.00	1.80	0.15	31.05		
	9th B main road from 10th B cross road to 13th B cross road		1	180.00	1.80	0.15	48.60		
	11th B cross road from 12th B main road to 9th B main road		1	130.00	1.80	0.15	35.10		
	13th B cross road from 8th B main road to 10th B main road		1	145.00	1.80	0.15	39.15		
	Cross road		1	260.00	1.80	0.15	70.20		
							495.90	1994.92	989280.83
	Basic Rate	1882.00							
	Area Weightage @ 6%	112.92							
	Total	1994.92							

KSRRB M400-17. Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406 Page No. 155/ Item No. 20.18/ PWD SR 2018-19

		Cum							
	13th B main road from 16th B cross road to 19th B cross road		1	76.00	6.00	0.20	91.20		
	18th B cross road from 13th B main road to 12th B main road		1	112.00	6.00	0.20	134.40		
	17th B cross road from 13th B main road to 12th B main road		1	114.00	6.00	0.20	136.80		
15	12th B main road from 16th B cross road to 19th B cross road		1	115.00	1.80	0.20	41.40		
	9th B main road from 10th B cross road to 13th B cross road		1	180.00	1.80	0.20	64.80		
	11th B cross road from 12th B main road to 9th B main road		1	130.00	1.80	0.20	46.80		
	13th B cross road from 8th B main road to 10th B main road		1	145.00	1.80	0.20	52.20		
	Cross road		1	260.00	1.80	0.20	93.60		
							661.2	2001.28	1323246.34
	Basic Rate	1888.00							
	Area Weightage @ 6%	113.28							
	Total	2001.28							

KSRRB M500-6. Providing and applying primer coat with S S. bitumen emulsion on prepared surface of granular base such as WMM including clearing of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per Specifications. MORTH Specification No. 502 Complete with all lead and lift and as per the direction of the Engineer-in-Charge. Page No. 161/ Item No. 21.6/ PWD SR 2018-19

	Sqm							
13th B main road from 16th B cross road to 19th B cross road		1	76.00	6.00		456.00		
18th B cross road from 13th B main road to 12th B main road		1	112.00	6.00		672.00		

16	17th B cross road from 13th B main road to 12th B main road		1	114.00	6.00		684.00		
	12th B main road from 16th B cross road to 19th B cross road		1	115.00	1.80		207.00		
	9th B main road from 10th B cross road to 13th B cross road		1	180.00	1.80		324.00		
	11th B cross road from 12th B main road to 9th B main road		1	130.00	1.80		234.00		
	13th B cross road from 8th B main road to 10th B main road		1	145.00	1.80		261.00		
	Cross road		1	260.00	1.80		468.00		
	Basic Rate	34.00					3306.0	36.04	119148.24
	Area Weightage @ 6%	2.04							
	Total	36.04							

KSRRB M500-17: Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications. MORTH Specification No. 507 - using 100/120 TPH capacity H.M.P. with sensor paver Gr-1 (80 mm to 100mm) with 4 % VG-30 Bitumen Page No. 160/ Item No. 21.17.3/ PWD SR 2018-19

		Cum							
17	13th B main road from 16th B cross road to 19th B cross road		1	76.00	6.00	0.050	22.80		
	18th B cross road from 13th B main road to 12th B main road		1	112.00	6.00	0.050	33.60		
	17th B cross road from 13th B main road to 12th B main road		1	114.00	6.00	0.050	34.20		
	12th B main road from 16th B cross road to 19th B cross road		1	115.00	1.80	0.050	10.35		
	9th B main road from 10th B cross road to 13th B cross road		1	180.00	1.80	0.050	16.20		
	11th B cross road from 12th B main road to 9th B main road		1	130.00	1.80	0.050	11.70		
	13th B cross road from 8th B main road to 10th B main road		1	145.00	1.80	0.050	13.05		
	Cross road		1	260.00	1.80	0.050	23.40		
							165.3	7138.04	1179918.01
	Basic Rate	6734.00							
	Area Weightage @ 6%	404.04							
	Total	7138.04							

KSRRB 500-2: Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH / Chapter 5 Complete with all lead and lift and as per the direction of the Engineer-in-Charge Page No. 158/ Item No. 21.2/ PWD SR 2018-19

		Sqm							
18	13th B main road from 16th B cross road to 19th B cross road		1	76.00	6.00		456.00		
	16th B cross road from 13th B main road to 12th B main road		1	112.00	6.00		672.00		
	17th B cross road from 13th B main road to 12th B main road		1	114.00	6.00		684.00		
	12th B main road from 16th B cross road to 19th B cross road		1	115.00	6.80		782.00		
	9th B main road from 10th B cross road to 13th B cross road		1	180.00	6.20		1116.00		
	11th B cross road from 12th B main road to 9th B main road		1	130.00	7.50		975.00		

	13th B cross road from 8th B main road to 10th B main road		1	145.00	6.60		957.00		
	Cross road		1	260.00	5.00		1300.00		
							6942.00	5.30	36793
	Basic Rate	5.00							
	Area Weightage @ 6%	0.30							
	Total	5.30							

19 KSRRB 500-7 Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH/Chapter 5 Page No. 158/ Item No. 21.7/ PWD SR 2018-19

		Sqm							
	13th B main road from 16th B cross road to 19th B cross road		1	76.00	6.00		456.00		
	18th B cross road from 13th B main road to 12th B main road		1	112.00	6.00		672.00		
	17th B cross road from 13th B main road to 12th B main road		1	114.00	6.00		684.00		
	12th B main road from 16th B cross road to 19th B cross road		1	115.00	6.80		782.00		
	9th B main road from 10th B cross road to 13th B cross road		1	180.00	6.20		1116.00		
	11th B cross road from 12th B main road to 9th B main road		1	130.00	7.50		975.00		
	13th B cross road from 8th B main road to 10th B main road		1	145.00	6.60		957.00		
	Cross road		1	260.00	5.00		1300.00		
	Basic Rate	14.00					6942.0	14.84	103019.28
	Area Weightage @ 6%	0.84							
	Total	14.84							

20 KSRRB M500- 19 Providing, laying bituminous/Concrete using 40/60 TPH capacity H.M.P with Mechanical paver Gr-II(30mm to 45mm), crushed aggregates of specified grading premixed with 5.4% VG 30 grade bituminous binder and filler , transporting the hot mix to work site , laying to the required grade level and alignment, rolling with wheeled , vibratory and tandeem rollers to achieve the desired compaction as per MORTH Table-500 9 including all leads and lift cost of all materials, labour. HOM of machineries complete as per specifications MORTH Specification No.509 Complete with all lead and lift and as per the direction of the Engineer-in-Charge Page No. 162/ Item No. 21.23.4/ PWD SR 2018-19

		Cum							
	13th B main road from 16th B cross road to 19th B cross road		1	76.00	6.00	0.040	18.24		
	18th B cross road from 13th B main road to 12th B main road		1	112.00	6.00	0.040	26.88		
	17th B cross road from 13th B main road to 12th B main road		1	114.00	6.00	0.040	27.36		
	12th B main road from 16th B cross road to 19th B cross road		1	115.00	6.80	0.040	31.28		
	9th B main road from 10th B cross road to 13th B cross road		1	180.00	6.20	0.040	44.64		
	11th B cross road from 12th B main road to 9th B main road		1	130.00	7.50	0.040	39.00		
	13th B cross road from 8th B main road to 10th B main road		1	145.00	6.60	0.040	38.28		
	Cross road		1	260.00	5.00	0.040	52.00		
	Basic Rate	7778.00					277.68	8244.68	2289382.74
	Area Weightage @ 6%	466.68							
	Total	8244.68							

	KSRR& M800-13 Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area. thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC 35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803								
		Sqm							
21	13th B main road from 16th B cross road to 19th B cross road		2.5	76.00	0.15		28.50		
	18th B cross road from 13th B main road to 12th B main road		2.5	112.00	0.15		42.00		
	17th B cross road from 13th B main road to 12th B main road		2.5	114.00	0.15		42.75		
	12th B main road from 16th B cross road to 19th B cross road		2.5	115.00	0.15		43.13		
	9th B main road from 10th B cross road to 13th B cross road		2.5	180.00	0.15		67.50		
	11th B cross road from 12th B main road to 9th B main road		2.5	130.00	0.15		48.75		
	13th B cross road from 8th B main road to 10th B main road		2.5	145.00	0.15		54.38		
	Basic Rate	429.00					327.0	454.74	148699.98
	Area Weightage @ 6%	25.74							
	Total	454.74							
								Sub Total	8846358.00
	GST 12%								1061562.96
	Project Management Consultancy 0.5%								44231.79
	Detailed project report 0.5%								44231.79
	Miscellaneous and unforseen Charges								3615.46
								Total	10000000.00

8846358.67

CERTIFICATE

1 The Work spot has been inspected and the work found to be necessary
2 The Estimate is prepared as per the PWD SR 2018-19
3 The Provision made in estimate are adequate and essential
4 The area comes under BBMP limits

CIVIL QUANTITY CONSULTANTS & ENGINEERS Madhu Bangalore

Asst Engineer
Ward No-04

Asst Executive Engineer
Yelahanka Division Sub Division
BBMP

Executive Engineer
Yelahanka -Division
BBMP

Technical Sanction
Accorded For Rs. 100.00 Lakhs only
Head of A/C. P-2415
CER NO :...158..... Dt... 10.12.2018

TA CE (YNK)

BRUHAT BENGALURU MAHANAGARA PALIKE

Yelahanka Division

Name of Work :Improvements to roads & drains at LIG and MIG, 3rd Phase and Surrounding areas in ward no.04.

Est .Cost Rs. 100.00 Lakhs

Sl No	Description of Items	Unit	No	L	B	D	Qty	Rate	Amount
	Removing and refixing stone slabs of drains and pointing in CM (1:3)(Pg no 27/5.33)								
		Sqm							
	Bright law college road from 7th B main road 6th B main road	LHS	2	133.00	1.20		319.20		
	Hoysala Ground Backside road from 6th B main road to 1st A cross road	LHS	1	355.00	0.90		319.50		
		RHS	1	415.00	0.90		373.50		
	Shiradi shrinivasa apartment road	LHS	1	40.00	0.90		36.00		
		RHS	1	40.00	0.90		36.00		
1	1st main road from newtown main road to 1st cross road		1	100.00	0.90		90.00		
	1st cross road from 1st main road to Dead end		1	250.00	0.90		225.00		
	2nd cross road from 1st main road to Dead end		1	270.00	0.90		243.00		
							1642.20		
	Missing Slabs 29%						476.24		
							1165.96	111.30	129771.57
	Basic Rate	105.00							
	Area Weightage @ 6%	6.30							
		111.30							
	KSRRB 300-3. Earthwork excavation by manual means in ordinary soil involving in average horizontal throw up to 2m & an average lift upto 1.5m , excavated surface leveled & sides neatly dressed , the disposed earth to be levelled neatly after breaking of clods complete as per specification MORTH/ Chapter 3. Page No. 142/ Item No. 19.1/ PWD SR 2018-19								
	Desilt								
	Bright law college road from 7th B main road 6th B main road	LHS	2	133.00	0.60	0.60	95.76		
	Hoysala Ground Backside road from 6th B main road to 1st A cross road	LHS	1	355.00	0.60	0.60	127.80		
		RHS	1	415.00	0.60	0.60	149.40		
	1st main road from newtown main road to 1st cross road		1	100.00	0.60	0.60	36.00		
2	1st cross road from 1st main road to Dead end		1	250.00	0.60	0.60	90.00		
	2nd cross road from 1st main road to Dead end		1	270.00	0.60	0.60	97.20		
	New drain								
	Shiradi shrinivasa apartment road		2	40.00	1.35	0.90	97.20		
	Basic Rate	130.00					693.36	233.20	161691.55
	Loading & unLoading	57.00							
	Add for lead for earth (1.28 Tonne / Cum) 16km	38.40							
	Area Weightage @ 6%	7.80							
		233.20							
	KSRB 4-1.2 : Providing and laying in position plain cement concrete of cum mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. KBS 4.1.4.2 (Page No.13, I No.4.2 of KPWD SR 2018-19)								
	Bed Concrete								
3	Shiradi shrinivasa apartment road		2	40.00	1.20	0.15	14.40		
	New Culvert								
		RHS	4	7.50	1.50	0.15	6.75		
							21.15	5505.64	116444.29
	Basic Rate	5194.00							
	Area Weightage @ 6%	311.64							
	Total	5505.64							

KSRB 4.2.2 : Providing and laying in position reinforced cement concrete of design mix M20 with OPC cement @ 320 kgs. with 20mm and down size graded granite metal coarse aggregates @0.878cum and fine aggregates @ 0.459cum, with superplasticiser @ 3lts confirming to IS9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15cms thick, vibrated for all works in foundation plinth and ground floor level for roof slabs, staircase, lintles, retaining walls, return walls, walls (any thickness) including attached plasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cill, fillet etc, including cost of all materials, labour, HOM of machinery, curing, complete as per specifications. Specification No. KBS 4.1, 4.6 (Page 14/4.11) 2018-19

	Walls								
	Shiradi shrinivasa apartment road		2	40.00	0.15	0.90	10.80		
	Raft								
	Shiradi shrinivasa apartment road		2	40.00	0.90	0.15	10.80		
							21.60		
	Walls								
4	**New Culvert**								
	Chikkabommasandra main road	RHS	8	7.50	0.20	0.90	10.80		
	Raft								
	New Culvert								
	Chikkabommasandra main road	RHS	4	7.50	1.20	0.15	5.40		
	Copping								
	1st main road from newtown main road to 1st cross road		2	100.00	0.45	0.10	9.00		
							46.80		
							121.50	5998.54	**728822.61**
	Basic Rate	5659.00							
	Area Weightage @ 6%	339.54							
	Total	**5998.54**							

KSRB 4.6.4 : **Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface** such as walls at any thickness, including attached pilasters, buttresses, plinth cills and string courses cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 (Page 16/4.31) of KPWD S.R 2018-19

	Bed Concrete								
	Shiradi shrinivasa apartment road		8	40.00		0.90	288.00		
5	**New Culvert**								
	Chikkabommasandra main road	RHS	16	7.50		0.90	108.00		
							396.00	379.48	**150274.08**
	Basic Rate	358.00							
	Area Weightage @ 6%	21.48							
	Total	**379.48**							

KSRB 4.9.2 : Providing **T.M.T Fe 500 steel** reinforcement for R.C.C. work including straightening, cutting, bending, hooking, placing in position, lapping and /-or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured & paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3(P-18/4.46.2)

	For Drain	**Ton**							
	Total RCC Quantity =	Cum					21.60		
	For 1 Cum = 60	Kg					60.00		
		Kg					1296.00		
6	**For Culvert**	**Ton**							
	Total RCC Quantity =	Cum					46.80		
	For 1 Cum = 85	Kg					85.00		
		Kg					3978.00		
							5.27	75223.96	**396731.17**
	Basic Rate	70966.00							
	Area Weightage @ 6%	4,257.96							
	Total	**75223.96**							

Providing & laying precast drain cover slab of 100 mm thickness in CM 1:3 including cost of all materials, labour, curing, transportation, loading, unloading etc, complete as per the directions of the Engineer In Charge.(1.20 x 0.60 x 0.10)Data rate

		Sqm							
7	Misting slab						476.24		
	Shiradi shrinivasa apartment road		1	40.00	0.90		36.00		
							512.24	2095.00	**1073138.61**
	DATA Rate	2095.00							
	Total	**2095.00**							

	Providing & laying precast drain cover slab of 250 mm thickness in CM 1:3 including cost of all materials, labour, curing, transportation, loading, unloading etc. complete as per the directions of the Engineer In Charge (1.2 x 0.60 x 0.10)Data rate								
	Covering slab	Sqm							
	New Culvert								
8			4	7.60	1.80		54.72		
							54.72	5418.00	296472.96
		Sqm							
	Data Rate	5418.00							
	Total	5418.00							
	Removing and resetting of kerb stones. Page No. 270/ Item No 37.57/ PWD SR 2018-19								
		mtr							
	Bright law college road from 7th B main road 6th B main road	LHS	2	133.00			266.00		
9	Hoysala Ground Backside road from 6th B main road to 1st A cross road	LHS	1	355.00			355.00		
		RHS	1	415.00			415.00		
							1036.00		
	Missing kerb 30%						310.80		
	Basic Rate	99.00					725.20	104.94	76102.49
	Area Weightage @ 6%	5.94							
	Total	104.94							
	Providing and fixing pre cast solid concrete kerb stones of size 450x150x500 mm made out of CC 1:2:4 and finished with CM 1:3 plastering and finishing cutting etc., complete Page No. 27/ Item No. 5.29.2/ PWD SR 2018-19								
		No's							
	length of kerb					310.80			
10	No Of Kerb Length/.45						690.67		
	Shiradi shrinivasa apartment road	LHS	1	40.00	0.45		88.89		
		RHS	1	40.00	0.45		88.89		
	Basic Rate	441.00					868.44	467.46	405963
	Area Weightage @ 6%	26.46							
	Total	467.46							
	KSRRB 800-1. Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8 Page No. 180/ Item No. 24.1/ PWD SR 2018-19								
		Sqm							
11			1	310.80	0.40		124.32		
							124.32	84.80	10542.34
	Basic Rate	80.00							
	Area Weightage @ 6%	4.80							
	Total	84.80							
	KSRRB M300-14. Excavation for roadwork in all types of soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location to a lead of 1.00 km and complete as per specifications. MORTH Specification No.301(pg no-143,S.Lno-19.14)KPWD S.R 2018-19								
	Road Work	Cum							
	Bright law college road from 7th B main road 6th B main road		1	133.00	2.10		279.30		
	Hoysala Ground Backside road from 6th B main road to 1st A cross road		1	415.00	1.80		747.00		
	Shiradi shrinivasa apartment road		1	40.00	1.80		72.00		
12	1st cross road from 1st main road to Dead end		1	240.00	1.80		432.00		

	2nd cross road from 1st main road to Dead end		1	230.00	1.80		414.00		
							1944.30	138.86	269985.50
	Basic Rate	41.00							
	Loading & unLoading	57.00							
	Add for lead for earth (1.28 Tonne / Cum) for 15km	38.40							
	Area Weightage @ 6%	2.46							
		138.86							

KSRRB M400-6.1: Construction of granular sub-base by providing close graded material, mixing in a mechaical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications.
A. Plant Mix Method For Grading II Material (pg no- 153,S.Lno-20.5)KPWD S.R 2018-19

		Cum							
13	Bright law college road from 7th B main road 6th B main road		1	133.00	2.10	0.15	41.90		
	Hoysala Ground Backside road from 6th B main road to 1st A cross road		1	415.00	1.80	0.15	112.05		
	Shiradi shrinivasa apartment road		1	40.00	1.80	0.15	10.80		
	1st cross road from 1st main road to Dead end		1	240.00	1.80	0.15	64.80		
	2nd cross road from 1st main road to Dead end		1	230.00	1.80	0.15	62.10		
							291.65	1994.92	581808.44
	Basic Rate	1882.00							
	Area Weightage @ 6%	112.92							
	Total	1994.92							

KSRRB M400-17: Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of upper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406 Page No. 155/ Item No. 20.18/ PWD SR 2018-19

		Cum							
14	Bright law college road from 7th B main road 6th B main road		1	133.00	2.10	0.225	62.84		
	Hoysala Ground Backside road from 6th B main road to 1st A cross road		1	415.00	1.80	0.225	168.08		
	Shiradi shrinivasa apartment road		1	40.00	1.80	0.225	16.20		
	1st cross road from 1st main road to Dead end		1	240.00	1.80	0.225	97.20		
	2nd cross road from 1st main road to Dead end		1	230.00	1.80	0.225	93.15		
							437.5	2001.28	875494.96
	Basic Rate	1888.00							
	Area Weightage @ 6%	113.28							
	Total	2001.28							

KSRRB M500-6: Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including clearing of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per Specifications. MORTH Specification No. 502 Complete with all lead and lift and as per the direction of the Engineer-in-Charge. Page No. 161/ Item No. 21.6/ PWD SR 2018-19

		Sqm							
15	Bright law college road from 7th B main road 6th B main road		1	133.00	2.10		279.30		
	Hoysala Ground Backside road from 6th B main road to 1st A cross road		1	415.00	1.80		747.00		
	Shiradi shrinivasa apartment road		1	40.00	1.80		72.00		

	1st cross road from 1st main road to Dead end		1	240.00	1.80		432.00		
	2nd cross road from 1st main road to Dead end		1	230.00	1.80		414.00		
		Basic Rate	34.00					1944.3 / 36.04	70072.57
		Area Weightage @ 6%	2.04						
		Total	36.04						

KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications. MORTH Specification No. 507 - using 100/120 TPH capacity H.M.P. with sensor paver

	Gr-1 (60 mm to 100mm) with 4 % VG-30 Bitumen Page No. 160/ Item No. 21.17.3/ PWD SR 2018-19								
		Cum							
16	Bright law college road from 7th B main road 6th B main road		1	133.00	2.10	0.050	13.97		
	Hoysala Ground Backside road from 6th B main road to 1st A cross road		1	415.00	1.80	0.050	37.35		
	Shiradi shrinivasa apartment road		1	40.00	1.80	0.050	3.60		
	1st cross road from 1st main road to Dead end		1	240.00	1.80	0.050	21.60		
	2nd cross road from 1st main road to Dead end		1	230.00	1.80	0.050	20.70		
							97.2 /	7138.04	693924.56
		Basic Rate	6734.00						693813.49
		Area Weightage @ 6%	404.04						
		Total	7138.04						

KSRRB 500-2. Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH / Chapter 5 Complete with all lead and lift and as per the direction of the Engineer-in-Charge Page No. 158/ Item No. 21.2/ PWD SR 2018-19

		Sqm							
17	Bright law college road from 7th B main road 6th B main road		1	133.00	7.40		984.20		
	Hoysala Ground Backside road from 6th B main road to 1st A cross road		1	415.00	6.00		2490.00		
	Shiradi shrinivasa apartment road		1	40.00	4.90		196.00		
	1st main road from newtown main road to 1st cross road		1	105.00	7.00		735.00		
	1st cross road from 1st main road to Dead end		1	240.00	7.00		1680.00		
	2nd cross road from 1st main road to Dead end		1	230.00	6.00		1380.00		
							7465.20 /	5.30	39566
		Basic Rate	5.00						39565.56
		Area Weightage @ 6%	0.30						
		Total	5.30						

KSRRB 500-7. Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm. heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH/Chapter 5 Page No. 158/ Item No. 21.7/ PWD SR 2018-19

		Sqm							
	Bright law college road from 7th B main road 6th B main road		1	133.00	7.40		984.20		
	Hoysala Ground Backside road from 6th B main road to 1st A cross road		1	415.00	6.00		2490.00		

18	Shiradi shrinivasa apartment road		1	40.00	4.90		196.00		
	1st main road from newtown main road to 1st cross road		1	105.00	7.00		735.00		
	1st cross road from 1st main road to Dead end		1	240.00	7.00		1680.00		
	2nd cross road from 1st main road to Dead end		1	230.00	6.00		1380.00		
	Basic Rate	14.00					7465.2	14.84	110783.57
	Area Weightage @ 6%	0.84							
	Total	14.84							

KSRRB M500-19. Providing, laying bituminousConcrete using 40/60 TPH capacity H.M.P with Mechanical paver Gr-II(30mm to 45mm), crushed aggregates of specified grading premixed with 5.4% VG 30 grade bituminous binder and filler , transporting the hot mix to work site , laying to the required grade,level and alignment, rolling with wheeled , vibratory and tandeem rollers to achieve the desired compaction as per MORTH Table-500 9 including all leads and lift cost of all materials, labour, HOM of machineries complete as per specifications MORTH Specification No.509 Complete with all lead and lift and as per the direction of the Engineer-in-Charge Page No. 162/ Item No. 21.23.4/ PWD SR 2018-19

		Cum							
	Bright law college road from 7th B main road 6th B main road		1	133.00	7.40	0.040	39.37		
	Hoysala Ground Backside road from 6th B main road to 1st A cross road		1	415.00	6.00	0.040	99.60		
19	Shiradi shrinivasa apartment road		1	40.00	4.90	0.040	7.84	Cmeshwara	
	1st main road from newtown main road to 1st cross road		1	105.00	7.00	0.040	29.40		
	1st cross road from 1st main road to Dead end		1	240.00	7.00	0.040	67.20		
	2nd cross road from 1st main road to Dead end		1	230.00	6.00	0.040	55.20		
	Basic Rate	7778.00					298.61	8244.68	2461927.41
	Area Weightage @ 6%	466.68							2461943.89
	Total	8244.68							

KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC 35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803

		Sqm							
	Bright law college road from 7th B main road 6th B main road		2.5	133.00	0.15		49.88		
Bright new	Hoysala Ground Backside road from 6th B main road to 1st A cross road	to CBS	2.5	415.00	0.15		155.63		
20	Shiradi shrinivasa apartment road		2.5	40.00	0.15		15.00		
	1st main road from newtown main road to 1st cross road		2.5	105.00	0.15		39.38		
	1st cross road from 1st main road to Dead end		2.5	240.00	0.15		90.00		
	2nd cross road from 1st main road to Dead end		2.5	230.00	0.15		86.25		
	Basic Rate	429.00					436.1	454.74	198323.48
	Area Weightage @ 6%	25.74							198312.11
	Total	454.74							

								Sub Total	8847840.74
	GST 12%								1061701.73
	Project Management Consultancy 0.5%								44239.20
	Detailed project report 0.5%								44239.20
	Miscellaneous and unforseen Charges								1939.96
								Total	10000000.00

8847840.74 + 1061701.73 = 9909542.47

9909542.47 + 44239.20 + 44239.20 + 1939.96 = 10000000.63

CERTIFICATE

1 The Work spot has been inspected and the work found to be necessary

2 The Estimate is prepared as per the PWD SR 2018-19

3 The Provision made in estimate are adequate and essential

4 The Estimate is within the limits under BBMP limits

Technical Sanction
Accorded For Rs. 1 Cr. 00 lakhs only
Head of A/C P-2-415
CER NO :.162..... Dt:.10.12.2018

Asst Engineer
Ward No-04

Asst Executive Engineer
Yelahanka Upanagara Upavibhaga

TA

CE (YNK)

Executive Engineer
Yelahanka Division
BBMP

BRUHAT BENGALURU MAHANAGARA PALIKE

Yelahanka Division

Name of Work :Improvements to roads & drains at A sector & surrounding areas in ward no.04.

Sl No	Description of Items	Unit	No	L	B	D	Est .Cost Rs. 100.00 Lakhs Qty	Rate	Amount
	Removing and refixing stone slabs of drains and pointing in CM (1:3)(Pg no 27/5.33)								
		Sqm							
	10th A cross road from 1st A main road to 6th A main road	LHS	1	257.00	0.90		231.30		
		RHS	1	251.00	0.90		225.90		
	9th A cross road from 1st A main road to 6th A main road	LHS	1	432.00	0.90		388.80		
		RHS	1	428.00	0.90		385.20		
	7th A cross road from 2nd A main road to 12th A main road	LHS	1	300.00	0.90		270.00		
1		RHS	1	285.00	0.90		256.50		
	3rd A main road from 4th A cross road to 7th A cross road		2	135.00	0.90		243.00		
	4th A main road from 4th A cross road to 7th A cross road	LHS	2	137.00	0.90		246.60	Addamed	
							2247.30		
	Missing Slabs 30%						674.19		
							1573.11	111.30	175087.14
	Basic Rate	105.00							
	Area Weightage @ 6%	6.30							
		111.30							
	KSRRB 300-3. Earthwork excavation by manual means in ordinary soil involving in average horizontal throw up to 2m & an average lift upto 1.5m , excavated surface leveled & sides neatly dressed , the disposed earth to be levelled neatly after breaking of clods complete as per specification MORTH/ Chapter 3. Page No. 142/ Item No. 19.1/ PWD SR 2018-19								
	Deslit								
	10th A cross road from 1st A main road to 6th A main road	LHS	1	257.00	0.60	0.65	100.23		
		RHS	1	251.00	0.60	0.60	90.36		
	9th A cross road from 1st A main road to 6th A main road	LHS	1	432.00	0.60	0.60	155.52		
		RHS	1	428.00	0.60	0.60	154.08		
	7th A cross road from 2nd A main road to 12th A main road	LHS	1	300.00	0.60	0.65	117.00		
		RHS	1	285.00	0.60	0.60	102.60		
2	3rd A main road from 4th A cross road to 7th A cross road		2	135.00	0.60	0.65	105.30		
	4th A main road from 4th A cross road to 7th A cross road	LHS	2	137.00	0.60	0.65	106.86		
	New Culvert								
		RHS	4	7.50	1.80	0.90	48.60		
	Basic Rate	130.00					980.55	233.20	228664.26
	Loading & unLoading	57.00							
	Add for lead for earth (1.28 Tonne / Cum) 16km	38.40							
	Area Weightage @ 6%	7.80							
		233.20							
	KSRB 4-1.2 : Providing and laying in position plain cement concrete of cum mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @0.465cum machine mixed, machine mixed concrete laid in layers not exceeding 15 cms thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. KBS 4.1.4.2 (Page No.13, I No.4.2 of KPWD SR 2018-19)								
	Bed Concrete								
3	New Culvert								
		RHS	4	7.50	1.50	0.15	6.75		
							6.75	5505.64	37163.07
	Basic Rate	5194.00							
	Area Weightage @ 6%	311.64							
	Total	5505.64							

KSRB 4.2.2 : Providing and laying in position reinforced cement concrete of design mix M20 with OPC cement @ 320 kgs, with 20mm and down size graded granite metal coarse aggregates @0.878cum and fine aggregates @ 0.459cum, with superplasticiser @ 3lts confirming to IS9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15cms thick, vibrated for all works in foundation plinth and ground floor level for roof slabs, staircase, lintles, retaining walls, return walls, walls (any thickness) including attached plasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cill, fillet etc. including cost of all materials, labour, HOM of machinery, curing, complete as per specifications. Specification No. KBS 4.1, 4.6 (Page 14/4.11) 2018-19

4	**Walls**								
	New Culvert								
		RHS	8	7.50	0.20	0.90	10.80		
	Raft								
	New Culvert								
		RHS	4	7.50	1.20	0.15	5.40		
							16.20	5998.54	**97176.35**
	Basic Rate	5659.00							
	Area Weightage @ 6%	339.54							
	Total	**5998.54**							

KSRB 4.6.4 : **Providing and removing centering, shuttering**, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, including attached pilasters, buttresses, plinth cills and string courses cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 (Page 16/4.31) of KPWD S.R 2018-19

5	**New Culvert**								
		RHS	16	7.50		0.90	108.00		
							108.00	379.48	**40983.84**
	Basic Rate	358.00							
	Area Weightage @ 6%	21.48							
	Total	**379.48**							

KSRB 4.9.2 : Providing **T.M.T Fe 500 steel** reinforcement for R.C.C. work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured & paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3(P-18/4.46.2)

6	**For Culvert**	**Ton**							
	Total RCC Quantity =	Cum					16.20		
	For 1 Cum = 85	Kg					85.00		
		Kg					1377.00		
							1.38	75223.96	**103583.39**
	Basic Rate	70966.00							
	Area Weightage @ 6%	4,257.96							
	Total	**75223.96**							103809.06

Providing & laying precast drain cover slab of 100 mm thickness in CM 1:3 including cost of all materials, labour, curing, transportation, loading, unloading etc. complete as per the directions of the Engineer in Charge.(1.20 x 0.60 x 0.10)Data rate

7		**Sqm**							
	Missing slab						674.19		
							674.19	2095.00	**1412428.05**
	DATA Rate	2095.00							
	Total	**2095.00**							

Providing & laying precast drain cover slab of 250 mm thickness in CM 1:3 including cost of all materials, labour, curing, transportation, loading, unloading etc. complete as per the directions of the Engineer in Charge.(1.2 x 0.60 x 0.10)Data rate

8	**Covering slab**	**Sqm**							
	New Culvert								
		RHS	4	7.60	2.00		60.80		
							60.80	**5418.00**	**329414.40**
		Sqm							
	Data Rate	5418.00							
	Total	**5418.00**							

Removing and resetting of kerb stones. Page No. 270/ Item No.37.57/ PWD SR 2018-19

	mtr						
10th A cross road from 1st A main road to 6th A main road	LHS	1	257.00			257.00	
	RHS	1	251.00			251.00	
9th A cross road from 1st A main road to 6th A main road	LHS	1	432.00			432.00	
	RHS	1	428.00			428.00	
7th A cross road from 2nd A main road to 12th A main road	LHS	1	300.00			300.00	

3rd A main road from 4th A cross road to 7th A cross road	RHS	1	285.00			285.00		
4th A main road from 4th A cross road to 7th A cross road		2	135.00			270.00		
	LHS	2	137.00			274.00		
Missing kerb 30%						2497.00		
						749.10		
Basic Rate	99.00					1747.90	104.94	183424.63
Area Weightage @ 6%	5.94							
Total	104.94							

10 Providing and fixing pre cast solid concrete kerb stones of size 450x150x500 mm made out of CC 1:2:4 and finished with CM 1:3 plastering and finishing cutting etc . complete Page No. 27/ Item No. 5.29.2/ PWD SR 2018-19

	No's							
No Of Kerb Legth/ 45						749.10		
						1664.67	467.46	778165.08
Basic Rate	441.00							778166.64
Area Weightage @ 6%	26.46							
Total	467.46							

11 KSRRB 800-1 Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8 Page No. 180/ Item No. 24.1/ PWD SR 2018-19

	Sqm							
		1	749.10	0.40		299.64		
						299.64	84.80	25409.47
Basic Rate	80.00							
Area Weightage @ 6%	4.80							
Total	84.80							

12 Removing and resetting of footpath slab Page No. 270/ Item No.37.56/ PWD SR 2018-19

	mtr							
9th A cross road from 1st A main road to 6th A main road	LHS	1	432.00	0.90		388.80		
	RHS	1	428.00	0.90		385.20		
						774.00		
Missing cobble stone (25%						193.50		
Basic Rate	197.00					580.50	208.82	121220.01
Area Weightage @ 6%	11.82							
Total	208.82							

13 KSRB 14.6-1: Providing and laying heavy duty cobble stones 60mm thick interlock pavers, using cement and course sand for manufacture of blocks of approved size, shape and colour with a minimum compressive strength of 281 kg per sqm over 50mm thick sand bed (average thickness) and compacting with plate vibrator having 3 tons compaction force thereby forcing part of sand underneath to come up in between joints, final compaction of paver surface joints into its final level, including cost of materials, labour and HOM of machineries complete as per specifications. Specification No. KBS. (P.No. 103, I.No. 14.6 of CSR 2018-19)

	mtr							
Missing cobble stone 25%						193.50		
Basic Rate	1053.00					193.50	1116.18	215980.83
Area Weightage @ 6%	63.18							
Total	1116.18							

14 KSRRB M300-14. Excavation for roadwork in all types of soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location to a lead of 1.00 km and complete as per specifications. MORTH Specification No.301(pg no-143,S.Lno-19.14)KPWD S.R 2018-19

Road Work	Cum							
9th A cross road from 1st A main road to 6th A main road		1	432.00	2.10	0.30	272.16		
7th A cross road from 2nd A main road to 12th A main road		1	300.00	1.80	0.30	162.00		
3rd A main road from 4th A cross road to 7th A cross road		1	135.00	1.80	0.30	72.90		
4th A main road from 4th A cross road to 7th A cross road		1	137.00	1.80	0.30	73.98		
						581.04	138.86	80683.21
Basic Rate	41.00							
Loading & unLoading	57.00							
Add for lead for earth (1.25 Tonne / Cum) for 15km	38.40							
Area Weightage @ 6%	2.46							
	138.86							

15 KSRRB M400-6.1 Construction of granular sub-base by providing close graded material, mixing in a mechaical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications
A. Plant Mix Method For Grading II Material (pg no- 153.S Lno-20.5)KPWD S R 2018-19

	Cum								
9th A cross road from 1st A main road to 6th A main road		1	432.00	2.10	0.15	136.08			
7th A cross road from 2nd A main road to 12th A main road		1	300.00	1.80	0.15	81.00			
3rd A main road from 4th A cross road to 7th A cross road		1	135.00	1.80	0.15	36.45			
4th A main road from 4th A cross road to 7th A cross road		1	137.00	1.80	0.15	36.99			
						290.52	1994.92	579564.16	
Basic Rate	1882.00								
Area Weightage @ 6%	112.92								
Total	1994.92								

16 KSRRB M400-17. Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406 Page No. 155/ Item No. 20.18/ PWD SR 2018-19

	Cum								
9th A cross road from 1st A main road to 6th A main road		1	432.00	2.10	0.20	181.44			
7th A cross road from 2nd A main road to 12th A main road		1	300.00	1.80	0.20	108.00			
3rd A main road from 4th A cross road to 7th A cross road		1	135.00	1.80	0.20	48.60			
4th A main road from 4th A cross road to 7th A cross road		1	137.00	1.80	0.20	49.32			
						387.4	2001.28	775215.82	
Basic Rate	1888.00								
Area Weightage @ 6%	113.28								
Total	2001.28								

17 KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM ,including clearing of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per Specifications. MORTH Specification No. 502 Complete with all lead and lift and as per the direction of the Engineer-in-Charge. Page No. 161/ Item No. 21.5/ PWD SR 2018-19

	Sqm							
9th A cross road from 1st A main road to 6th A main road		1	432.00	2.10		907.20		
7th A cross road from 2nd A main road to 12th A main road		1	300.00	1.80		540.00		
3rd A main road from 4th A cross road to 7th A cross road		1	135.00	1.80		243.00		
4th A main road from 4th A cross road to 7th A cross road		1	137.00	1.80		246.60		
						1936.8	36.04	69802.27
Basic Rate	34.00							
Area Weightage @ 6%	2.04							
Total	36.04							

18 KSRRB M500-17 Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications.. MORTH Specification No. 507 - using 100/120 TPH capacity H.M.P. with sensor paver Gr-1 (80 mm to 100mm) with 4 % VG-30 Bitumen Page No. 160/ Item No. 21.17.3/ PWD SR 2018-19

	Cum								
9th A cross road from 1st A main road to 6th A main road		1	432.00	2.10	0.050	45.36			
7th A cross road from 2nd A main road to 12th A main road		1	300.00	1.80	0.050	27.00			
3rd A main road from 4th A cross road to 7th A cross road		1	135.00	1.80	0.050	12.15			
4th A main road from 4th A cross road to 7th A cross road		1	137.00	1.80	0.050	12.33			
						96.8	7138.04	691247.79	
Basic Rate	6734.00								
Area Weightage @ 6%	404.04								
Total	7138.04								

19 KSRRB 500-2. Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH / Chapter 5 Complete with all lead and lift and as per the direction of the Engineer-in-Charge Page No. 158/ Item No. 21.2/ PWD SR 2018-19

		Sqm							
	9th A cross road from 1st A main road to 6th A main road		1	432.00	7.30		3153.60		
	7th A cross road from 2nd A main road to 12th A main road		1	300.00	6.60		1980.00		
	3rd A main road from 4th A cross road to 7th A cross road		1	135.00	7.20		972.00		
	4th A main road from 4th A cross road to 7th A cross road		1	137.00	6.40		876.80		
	Cross road		1	150.00	5.50		825.00		
							7807.40	5.30	41379
	Basic Rate	5.00							41379.22
	Area Weightage @ 6%	0.30							
	Total	5.30							

20 KSRRB 500-7. Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH/Chapter 5 Page No. 158/ Item No. 21.7/ PWD SR 2018-19

		Sqm							
	9th A cross road from 1st A main road to 6th A main road		1	432.00	7.30		3153.60		
	7th A cross road from 2nd A main road to 12th A main road		1	300.00	6.60		1980.00		
	3rd A main road from 4th A cross road to 7th A cross road		1	135.00	7.20		972.00		
	4th A main road from 4th A cross road to 7th A cross road		1	137.00	6.40		876.80		
	Cross road		1	150.00	5.50		825.00		
	Basic Rate	14.00					7807.4	14.84	115861.82
	Area Weightage @ 6%	0.84							
	Total	14.84							

21 KSRRB M500- 19. Providing, laying bituminousConcrete using 40/60 TPH capacity H.M.P with Mechanical paver Gr-II(30mm to 45mm), crushed aggregates of specified grading premixed with 5.4% VG 30 grade bituminous binder and filler , transporting the hot mix to work site , laying to the required grade,level and alignment, rolling with wheeled , vibratory and tandeem rollers to achieve the desired compaction as per MORTH Table-500.9 including all leads and lift cost of all materials, labour, HOM of machineries complete as per specifications MORTH Specification No 509 Complete with all lead and lift and as per the direction of the Engineer-in-Charge. Page No. 162/ Item No. 21.23.4/ PWD SR 2018-19

		Cum							
	9th A cross road from 1st A main road to 6th A main road		1	432.00	7.30	0.040	126.14		
	7th A cross road from 2nd A main road to 12th A main road		1	300.00	6.60	0.040	79.20		
	3rd A main road from 4th A cross road to 7th A cross road		1	135.00	7.20	0.040	38.88		
	4th A main road from 4th A cross road to 7th A cross road		1	137.00	6.40	0.040	35.07		
	Cross road		1	150.00	5.50	0.040	33.00		
	Basic Rate	7778.00					312.30	8244.68	2574780.59
	Area Weightage @ 6%	466.68							25748 3.56
	Total	8244.68							

	KSRRB M800-13 Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface :- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803								
		Sqm							
22	9th A cross road from 1st A main road to 6th A main road		2.5	432.00	0.15		162.00		
	7th A cross road from 2nd A main road to 12th A main road		2.5	300.00	0.15		112.50		
	3rd A main road from 4th A cross road to 7th A cross road		2.5	135.00	0.15		50.63		
	4th A main road from 4th A cross road to 7th A cross road		2.5	137.00	0.15		51.38		
	Basic Rate	429.00					376.5	454.74	171209.61
	Area Weightage @ 6%	25.74							
	Total	454.74							
								Sub Total	8848445.01
	GST 12%								1061813.40
	Project Management Consultancy 0.5%								44242.23
	Detailed project report 0.5%								44242.23
	Miscellaneous and unforseen Charges								1257.14
								Total	10000000.00

CERTIFICATE

1 The Work spot has been inspected and the work found to be necessary

2 The Estimate is prepared as per the PWD SR 2018-19

3 The Provision made in estimate are adequate and essential

4 The work comes under BBMP limits.

QUALITY CONSULTANTS & ENGINEERS Bangalore Consultants

Asst Engineer
Ward No-04

Asst Executive Engineer
ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಭಿಯಂತರರು
ಯಲಹಂಕ ಉಪವಿಭಾಗ ಉಪವಿಭಾಗ,
ಬ.ಬ.ಮ.ಪ BBMP ಬೆಂಗಳೂರು-106

Executive Engineer
Yelahanka -Division
BBMP

Administrative Sanction for Rs 300.00 lakhs
Three crores only
is accorded under head P-2415
Restore fund for roads
Register as CE No
to carry out the work mentioned in the subject
No. E.E/YNK/AS/40/2020-21 13.12.2020

Technical Sanction
Accorded For Rs.100.00 lakhs only
Head of A/C P-2415
CER NO : 161 Dt. 10.12.2020

TA CE (YNK)